

Fosroc® Conbextra EP75

High Strength Epoxy Resin Grout

Uses

Provides a free flowing grout, for use where physical properties and chemical resistance of the hardened grout are of utmost importance. It is suitable for a wide range of heavy duty applications including;

- Under plate grouting to substantial structural elements.
- Base plate grouting in dynamic load situations such as turbines and other reciprocating machinery.
- Heavy industrial applications in steelworks, refineries, chemical plants and electroplating works.
- Structural infill where very high strength is required.
- Rail track applications, to support heavy cranes, or on transporter rails.

Advantages

- Excellent durability - high compressive, flexural and tensile strengths ensure a long working life.
- Cost effective - high early strength gain promotes minimum downtime and early commissioning of machinery.
- User friendly - simple, full pack mixing to ensure that the performance characteristics are achieved.
- Versatile - suitable for a wide range of loading situations including repetitive dynamic loads.
- Excellent in service performance - non-shrink capability ensures full surface to surface contact.

Description

Conbextra EP75 is a solvent free epoxy resin grout designed for grouting of gap widths of 10 to 75 mm. It is supplied as a three component system consisting of base, hardener and specially graded aggregate. The components are supplied in the correct mix proportions designed for whole pack mixing on site.

Technical Support

Fosroc offers a comprehensive range of high quality, high performance construction products. In addition, Fosroc offers a worldwide technical support and on-site service to specifiers, end-users and contractors.

Properties

Compressive strength (ASTM C942)	: 80 N/mm ² @ 1 day
	95 N/mm ² @ 3 days
	100 N/mm ² @ 7 days
Flexural strength (ASTM C348)	: 30 N/mm ² @ 7 days
Tensile strength (ASTM C881)	: 14 N/mm ² at 7 days
Pot Life	: 75 minutes at 23°C
Maximum flow distance for a head of 100 mm at 20°C	: 35 mm gap - 2000 mm 70 mm gap - 3500 mm
Coefficient of thermal expansion (ASTM C531)	: 3.2 x 10 ⁻⁵

Specification Clauses

Where shown on the contract documents, the epoxy grout shall be Conbextra EP75 supplied by Fosroc. It shall provide good general chemical resistance, and a 7-day compressive strength of at least 100 N/mm²

Instructions for Use

Preparation

Under plate grouting

The unrestrained surface area of the grout must be kept to a minimum. Generally, the gap between the perimeter formwork and the plate edge should not exceed 150mm on the pouring side and 50 mm on the remaining sides. In specific thin section applications, the flank side formwork should be kept tight to the base plate. Air pressure relief holes should be provided to allow venting of any isolated high spots.

Formwork

The formwork should be constructed to be leak proof as Conbextra EP75 is a free flow grout. This can be achieved by using foam rubber strip or mastic sealant beneath the constructed formwork and between joints. For free flow grout conditions it is essential to provide a hydrostatic head of grout. To achieve this a feeding hopper should be used - please consult your local Fosroc office for more details.

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Foundation surface

This must be free from oil, grease, or any loosely adherent material. If the concrete surface is defective or has laitance, it must be cut back to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt or debris.

Base plate

If delay is likely before placing steel base plates, it is recommended that the underside and edges are coated with Nitoprime 25* to prevent rust formation and ensure bonding with the Conbextra EP75 grout. All metal surfaces should be cleaned to a bright finish in accordance with Swedish Standard SA 2½ or equal. Nitoprime 25 can be applied directly onto newly cleaned steel surfaces even if they are damp.

Mixing

Conbextra EP75 can be mixed by electric machines in plastic pail. Thoroughly power-mix Base and Hardener and add in Filler. Continue power mixing until all fillers are uniformly mixed with binder to form a homogeneous grout consistency. Once mixed, the material must be used within the specified pot life (see under Properties). After this time, unused material will have stiffened and should be discarded.

Note: *Immediately prior to placement, all surfaces must be dry.

Placing

Ensure that the grout can be placed within its pot life. Continuous grout flow is essential. Sufficient grout must be available prior to starting and the time taken to pour a batch must be regulated to the time taken to prepare the next one.

Pouring should be from one side of the void to eliminate air entrapment. The hydrostatic head must be maintained at all times so that a continuous grout front is achieved.

Cleaning

All tools and equipment should be cleaned immediately after use with Fosroc Solvent 102.

Hot Weather Working

Whilst the performance of Conbextra EP75 at elevated temperatures is assured, application under such conditions can sometimes be difficult. It is therefore suggested that, for temperatures above 35°C, the following guidelines are used:

Store unmixed materials in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.

Keep mixing and placing equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment which will come into direct contact with the material itself.

Try to eliminate application in the middle of the day, and certainly avoid application in direct sunlight.

Ensure that there are sufficient operatives available to complete application within the material's pot life.

Limitations

Grouts should not be placed in any unrestrained situation, i.e. base plate plinths, etc. Failure to comply may lead to crack development in the grout.

Estimating

Supply

Conbextra EP75	: 8 litre pack
Nitoprime 25	: 1 and 4 litre pack
Fosroc Solvent 102	: 5 and 20 litre packs

Coverage

Nitoprime 25	: 4.0 to 5.0 m ² /litre
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Storage

When stored in warehouse conditions below 35°C, Conbextra EP75 will have a shelf life of 12 months.

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Precautions

Health and Safety

Conbextra EP75 contains resins which may cause sensitisation by skin contact. Avoid contact with skin and eyes and inhalation of vapour. Wear suitable protective clothing, gloves and eye/face protection. Barrier creams provide additional skin protection.

Should accidental skin contact occur, remove immediately with a resin removing cream, followed by soap and water. Do not use solvent.

In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

Fire

Nitoprime 25 and Fosroc Solvent 102 are flammable.

Flash points

Nitoprime 25	: 39°C
Fosroc Solvent 102	: 33°C



Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it.

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